

**LEGEND**

- EXISTING RIGHT-OF-WAY LINE
- EXISTING STREAM CENTERLINE
- PROPOSED STORM MAINLINE
- PROPOSED STORM HEADWALL/ENDWALL
- PROPOSED STORM STRUCTURE LABEL
- PROPOSED STORM PIPE
- PROPOSED PIPE OUTLET PROTECTION
- TEMPORARY ROCK FILTER
- EXISTING CONTOUR LINE
- PROPOSED CONTOUR LINE
- PROPOSED SPOT ELEVATION
- LIMITS OF DISTURBANCE/APRIS BOUNDARY
- TEMPORARY FILTER FENCE
- INLET
- ENDWALL HEADWALL
- STORM
- PROPOSED STORM PIPE
- PROPOSED PIPE OUTLET PROTECTION
- TEMPORARY ROCK FILTER
- EXISTING CONTOUR LINE
- PROPOSED CONTOUR LINE
- PROPOSED SPOT ELEVATION
- LIMITS OF DISTURBANCE/APRIS BOUNDARY
- TEMPORARY FILTER FENCE

**SOILS CLASSIFICATIONS**

UM - UDORTHERENTS, STRIP MINE  
**SOIL LIMITATIONS**  
 THIS SOIL IS ASSOCIATED WITH PERVIOUS MINING ACTIVITY AT THIS LOCATION. THIS SOILS GENERALLY CONSISTS OF SEDIMENT, SILTS, ROCK, AND EXPOSED BEDROCK. DUE TO THE HIGH CONTENT OF SILTS AND BEDROCK, THIS SOIL IS NOT SUITABLE FOR PLANTING WITH IMPROVISED CORES FOR STABILITY. EXTREME ACIDITY CAUSES PROBLEMS WITH ESTABLISHING VEGETATION UNLESS LIMITED PERMEABILITY, RUNOFF AND WATER CAPACITY CAN GREATLY VARY THROUGHOUT THE SITE.  
 LIMITATIONS OF THIS SOIL CAN BE OVERCOME THROUGH THE USE OF DEVICES, SLOPE PROTECTION, CLAY DRIES, AND ANTI-SEEP DEVICES IN BERMS, AND CONSTRUCTION TECHNIQUES.  
**SITE STABILIZATION**  
 ANY DISTURBED AREA ON WHICH ACTIVITY HAS CEASED MUST BE STABILIZED IMMEDIATELY DURING NON-GERMINATING PERIODS. MULCH WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE RE-DISTURBED WITHIN ONE YEAR MAY BE STABILIZED IN ACCORDANCE WITH PERMANENT SEEDING SPECIFICATIONS. ANY AREAS WHICH ARE EITHER AT FINISHED GRADE OR WILL NOT BE RE-DISTURBED WITHIN ONE YEAR, MUST BE STABILIZED IN ACCORDANCE WITH PERMANENT SEEDING SPECIFICATIONS.  
 STABILIZATION OF ALL AREAS PROTECTED BY INTERIM CONTROL MEASURES/FACILITIES SHALL BE TO THE PERMANENT STRUCTURAL CONDITION OR 70% UNIFORM PERENNIAL VEGETATION BEFORE THE INTERIM MEASURES/FACILITIES CAN BE REMOVED.

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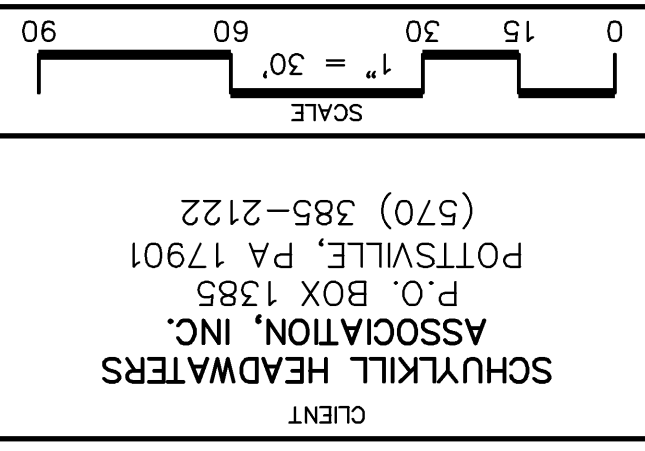
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NO.	DATE	REVISION

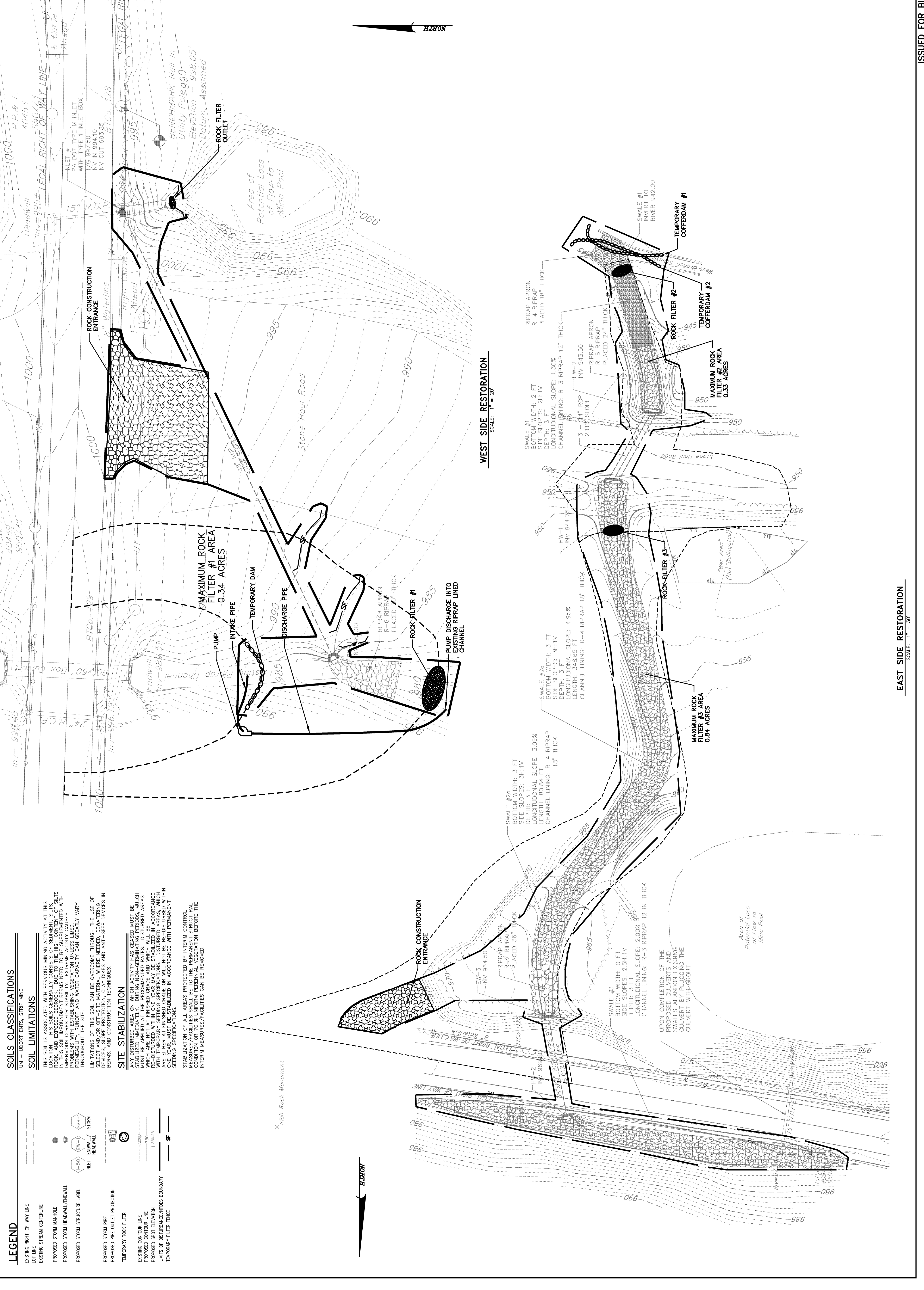


MANAGER:	CLAYTON BUECK, P.E.
DESIGN BY:	CH/CH
CHKD BY:	CH/CH
DRWN BY:	CH/CH
DATE:	NOV. 29, 2005
PROJECT:	ABANDONED MINE DRAINAGE REMEDIATION
CLIENT:	SCHUYLKILL HEADWATERS ASSOCIATION, INC.
ADDRESS:	P.O. BOX 1385, POTTSVILLE, PA 17901
PHONE:	(570) 385-2122
FAX:	(570) 385-2122
WEBSITE:	WWW.RETREM.COM
EMAIL:	RETREM@RETREM.COM
ADDRESS:	101 EAST UNION STREET, UNION STREET STATION, POTTSVILLE, PA 17901
PHONE:	(570) 622-8222
FAX:	(570) 622-4260
WEBSITE:	WWW.RETREM.COM
EMAIL:	RETREM@RETREM.COM



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 ENGINEERS - ENVIRONMENTAL CONSULTANTS - IT CONSULTANTS  
 SCHUYLKILL COUNTY, PA

ABANDONED MINE DRAINAGE REMEDIATION  
 FOR THE  
 MACKESBURG RESTORATION PROJECT  
**SCHUYLKILL HEADWATERS ASSOCIATION, INC.**  
 EROSION AND SEDIMENT CONTROL PLAN  
 SCHUYLKILL COUNTY, PA  
 DATE: NOV. 29, 2005  
 SHEET NO. 4 OF 6  
 DWG. NO. 05-04234-001



**WEST SIDE RESTORATION**  
 SCALE: 1" = 20'

**EAST SIDE RESTORATION**  
 SCALE: 1" = 30'

ISSUED FOR BIDDING/CONSTRUCTION